

Agathidium mexicanum Hendrichs, 1979: Types rediscovered

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Agathidium mexicanum Hendrichs, 1979: 106 is the single Mexican species of Leiodidae described by a Mexican entomologist: Chemical Engineer Jorge Hendrichs. As an amateur coleopterist he made a beetle collection of 18,400 specimens, adequately labeled by his wife and daughter. Most of the specimens are now in the entomological collection of the Instituto de Biología, UNAM. He published 12 papers, one of them devoted to the description of one leiodid species: *Agathidium mexicanum* Hendrichs, 1979. Type specimens of *A. mexicanum* were collected in Estado de Mexico and Distrito Federal (now Ciudad de México) localities (type locality: Cerro Tlaloc, Estado de México). The type series as described in the original description was constituted by 13 specimens: Holotype (male), allotype (female) and, 11 paratypes (6 males and 5 females). For specific details, data of the material examined is fully included (Hendrichs 1979: 110):

“ESTADO DE MÉXICO: Cerro Tlaloc 3800 m, 29-I-72, holotipo ♂, alotipo ♀ y 2 paratipos ♀ ♀; Río Frío: 3300 m, 30-I-72, 2 paratipos ♂ ♂ y 1 paratipo ♀; Jalatlaco: 3400 m, 29.-XII-77, 1 paratipo ♂ y 1 paratipo ♀; Lagunas de Zempoala: 3100 m, 16-IV-76, 1 paratipo ♀. DISTRITO FEDERAL: Desierto de los Leones, 3300 m, 2-XII-72, 1 paratipo ♂; Agua de Leones, 3300m, 13-IV-74, 1 paratipo ♂; Puerto de las Cruces, 3100m, 24-IX-72, 1 paratipo ♂. Todos colectados por Jorge Hendrichs S. Y Jorge Hendrichs N.”.

“El holotipo y un paratipo ♀ se depositan en el Museo de Historia Natural de la Ciudad de México. Dos paratipos en la colección del Dr. S. B. Peck, el alotipo y resto de los paratipos en la colección del autor”

Holotype and one paratype female to be deposited in the entomological collection of the Museo de Historia Natural de la Ciudad de México. Two paratypes in the personal collection of Dr. S. B. Peck, allotype and remaining paratypes in the author collection (Hendrichs 1979: 110).

Agathidium mexicanum is cited in the synopsis of Mexican Leiodidae by Peck (2000: 449). Later it is cited again in Miller and Wheeler (2005: 164) with a comment that the holotype “is not in either Universidad Nacional Autónoma de Mexico (UNAM) or the Museo de Historia Natural de la Ciudad de Mexico”. Zaragoza-Caballero and Pérez-Hernández (2017) published a catalog of Coleoptera types in the entomological collection at UNAM (CNIN) and include some leiodid species, but *A. mexicanum* is not mentioned.

In a recent visit to the Entomological Collection of the Institute of Biology at Universidad Nacional Autónoma de México we searched again in the CNIN collection looking for unidentified leiodids. After a close examination we found ten *Agathidium* specimens without identification labels. All the specimens were part of the Hendrichs collection.

Later we visited the entomological collection of the Museo de Historia Natural de la Ciudad de México. Biol. María E. Díaz Batres, curator of the collection for many years, told us that no types of the species were deposited in that collection. There are type specimens but of other leiodid species. She suspected that types will be in the entomological collection of the Institute of Ecology where some specimens of the J. Hendrichs collection are deposited. We asked Dr. C. Deloya and M.C. Leonardo Delgado, coleopterists of the Institute of Ecology, about such specimens, and no specimens were found. Finally, we asked Dr. S. Peck if he received the paratypes. He confirmed that no paratypes had been deposited in his collection.

After a careful and detailed examination of the specimens found at CNIN we conclude that the ten specimens are part of the type series of *Agathidium mexicanum* (three specimens are lost) but without type labels. These specimens are clearly an *Agathidium* species and label data are the same as label data of the type series of *A. mexicanum* cited in the original description (Hendrichs, 1979). So, the type series is constituted as (data from labels; information in bold is not included in the original publication):

- Tlaloc, Mex., 29.I.72, 3800 m, **bajo tronco**, Col. J. Hendrichs/ **macho 1/ Ex Colección Jorge Hendrichs S./ H. As**

the type series indicates that holotype is a male from Tlaloc and three paratype females from the same locality, this specimens we assume correspond to the holotype. So, a holotype label was added to the specimen. Remaining specimens were recognized as paratypes and labels were attached to each one.

- Tlaloc, Mex., 29.I.72, 3800 m, **bajo corteza**, Col. J. Hendrichs/ **hembra 2/ Ex Colección Jorge Hendrichs S./ H.**
- Tlaloc, Mex., 29.I.72, 3800 m, **bajo corteza**, Col. J. Hendrichs/ **hembra 3/ Ex Colección Jorge Hendrichs S./ H.**

One specimen of this series is lost. Original locality cited as Cerro Tlaloc.

- Río Frío, Mex, 30.I.72, 3300m, **Kiefernrinde [pine bark]**, Col. J. Hendrichs S./ **Macho/ Ex Colección Jorge Hendrichs S./ H. One adult plus a pronotum and one elytrum.**
- Río Frío, Mex, 30.I.72, 3300m, **Kiefernrinde**, Col. J. Hendrichs S./ **Hembra 8/ Ex Colección Jorge Hendrichs S.**
- **8 km al este de Jalatlaco, Mex, 3400m, corteza de pino**, Col. J. Hendrichs S./ **one male and one female specimens/ Ex Colección Jorge Hendrichs S.** In the original paper, some specific data were omitted as is the case of the specimens from Río Frío where **Kiefernrinde [pine bark]**, **Col. J. Hendrichs S./ Macho/ Ex Colección Jorge Hendrichs S./ H.** were omitted. We assume that the specific locality data of these specimens is the same as that mentioned in the paper just as Jalatlaco. Specimens were in the same lot and sex corresponds to the sex cited for the paratypes. So, we assume that these specimens are also specimens of the type series.
- The specimen from Lagunas de Zempoala is lost.
- **The specimen from Desierto de los Leones is lost.**
- Agua de Leones, **Desierto**, D.F, 13.IV.74, 3300 m, **trampa c. cebo**, Col. J. Hendrichs S./ **macho 6/ Ex Colección Jorge Hendrichs S./ H.**
- Las Cruces, D.F., 24.IX.72, 3100 m, **Kiefernrinde**, Col. J. Hendrichs S./ **Macho 5/ Ex Colección Jorge Hendrichs S./ H. The original locality cited as Puerto de las Cruces.**

Specimens are deposited at the Entomological Collection of the Institute of Biology (CNIN) in the type specimen collection. Specimens from Jalatlaco are in the Entomological Collection of the Centro de Estudios en Zoología, Universidad de Guadalajara.

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